

凍結時間の表

凍結時間の表 (0%の凍結)														
初期水温(θ_{iw}): 10°C 外気(周囲)温度(θ_a): -5°C														
容器の密度: 7850Kg/m ³ 管の定圧比熱(C _{Pp}): 0.44KJ/Kg・K 管内水の定圧比熱(C _{Pw}): 4.22KJ/Kg・K														
保温材料: A種押出法 [®] リスチレンフォーム保温板 1種 a 熱伝導率(λ_{ice}): 0.036W/(m・K)														
保温厚さ	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A
5mm	0.5h	0.7h	0.9h	1.2h	1.4h	1.8h	2.3h	2.7h	3.6h	4.4h	5.3h	7.0h	8.7h	10.4h
10mm	0.9h	1.3h	1.7h	2.2h	2.6h	3.4h	4.4h	5.2h	6.9h	8.6h	10.2h	13.6h	17.1h	20.5h
15mm	1.3h	1.7h	2.3h	3.1h	3.6h	4.7h	6.2h	7.5h	9.9h	12.5h	14.9h	20.0h	25.2h	30.3h
20mm	1.5h	2.1h	2.8h	3.8h	4.5h	6.0h	7.9h	9.6h	12.8h	16.1h	19.4h	26.2h	33.0h	39.8h
25mm	1.7h	2.4h	3.3h	4.5h	5.3h	7.1h	9.5h	11.5h	15.5h	19.6h	23.7h	32.1h	40.6h	49.1h
30mm	1.9h	2.7h	3.7h	5.1h	6.1h	8.1h	10.9h	13.3h	18.0h	22.9h	27.8h	37.8h	47.9h	58.1h
35mm	2.1h	2.9h	4.1h	5.6h	6.7h	9.0h	12.2h	14.9h	20.4h	26.0h	31.6h	43.3h	55.0h	66.8h
40mm	2.2h	3.2h	4.4h	6.1h	7.3h	9.9h	13.5h	16.5h	22.6h	29.0h	35.4h	48.6h	61.9h	75.4h
45mm	2.4h	3.4h	4.7h	6.6h	7.9h	10.7h	14.6h	18.0h	24.7h	31.8h	39.0h	53.7h	68.6h	83.7h
50mm	2.5h	3.6h	5.0h	7.0h	8.4h	11.5h	15.7h	19.4h	26.8h	34.6h	42.4h	58.7h	75.2h	91.9h
55mm	2.6h	3.7h	5.2h	7.4h	8.9h	12.2h	16.8h	20.7h	28.7h	37.2h	45.7h	63.5h	81.5h	99.8h
60mm	2.7h	3.9h	5.5h	7.7h	9.4h	12.8h	17.8h	22.0h	30.6h	39.7h	48.9h	68.1h	87.7h	107.6h
65mm	2.8h	4.1h	5.7h	8.1h	9.8h	13.5h	18.7h	23.2h	32.4h	42.1h	52.0h	72.6h	93.7h	115.1h
70mm	2.9h	4.2h	5.9h	8.4h	10.2h	14.1h	19.6h	24.3h	34.1h	44.5h	55.0h	77.0h	99.6h	122.6h
75mm	3.0h	4.3h	6.1h	8.7h	10.6h	14.7h	20.4h	25.4h	35.7h	46.7h	57.9h	81.3h	105.4h	129.8h
80mm	3.1h	4.5h	6.3h	9.0h	11.0h	15.2h	21.2h	26.5h	37.3h	48.9h	60.7h	85.5h	111.0h	136.9h
85mm	3.2h	4.6h	6.5h	9.3h	11.3h	15.7h	22.0h	27.5h	38.8h	51.0h	63.4h	89.5h	116.4h	143.9h
90mm	3.2h	4.7h	6.7h	9.5h	11.7h	16.2h	22.8h	28.5h	40.3h	53.0h	66.0h	93.4h	121.8h	150.7h
95mm	3.3h	4.8h	6.9h	9.8h	12.0h	16.7h	23.5h	29.4h	41.7h	55.0h	68.6h	97.3h	127.0h	157.4h
100mm	3.4h	4.9h	7.0h	10.0h	12.3h	17.2h	24.2h	30.3h	43.1h	56.9h	71.1h	101.0h	132.1h	163.9h